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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/034,982	12/28/2001	Yasuhiro Asawa	1217.003USQ	2498

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EXAMINER

THORNTON, YVETTE C

ART UNIT	PAPER NUMBER
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1752

DATE MAILED: 02/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/034,982

Applicant(s)

ASAWA ET AL.

Examiner

Yvette C. Thornton

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) 35-46 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 34 is/are allowed.
- 6) ☒ Claim(s) 1-16, 19-27 and 30-33 is/are rejected.
- 7) ☒ Claim(s) 17, 18, 28, 29 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☒ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 03192002 . 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

This is written in reference to application number 10/034982 filed on December 28, 2001 and published as US 2002/0160299 A1 on October 31, 2002 and is a CIP of US 6,506,536 B2.

#### *Priority*

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in the United States on October 15, 2001. It is noted, however, that Applicants have not filed a certified copy of the PCT application as required by 35 U.S.C. 119(b). The examiner notes that the PCT application PCT/US01/32120 was published as WO 200253626 on December 10, 2003.
2. The examiner notes the claim of domestic priority to U.S. Application Number 09/751,650 now U.S. Patent Number 6,506,536. The examiner has failed to find support for a bottom layer comprising a thermally sensitive supramolecular polymer, as set forth in the instant claims, in the specification of the parent application. Therefore, the effective filing date for the instant application is December 28, 2001. *See MPEP 2133.01.*

#### *Information Disclosure Statement*

3. The Information Disclosure Statement filed on March 19, 2002 has been entered and fully considered.

#### *Election/Restrictions*

4. Applicant's election with traverse of Group I, Claims 1-34 in Paper No. 10072003 is acknowledged. The traversal is on the ground(s) that any search of one of the three designated groups of claims would significantly overlap a search of any of the other groups. This is not found persuasive because while a complete search of the claimed product would

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include a determination of whether the claimed composition has been previously used or made, it does not limit the examiner to any given method of making or method of using as set forth in the non-elected groups. The examiner reserves the right to rejoin the process claims if the product claims as found to be allowable.

5. Groups I-III each have acquired separate status in the art as shown by their different classification, restriction for examination purposes as indicated in the previous office action is proper.

6. The requirement is still deemed proper and is therefore made FINAL.

#### *Claim Interpretations*

7. The examiner has interpreted claims 2-16 and 32-33 as not requiring the presence of a centered H-bond. Independent claim 1 discloses that the top layer comprising (a) a first thermally imageable composition comprising a first thermally sensitive supramolecular polymer or (b) a thermally imageable composition free of the said thermally sensitive supramolecular polymer. Therefore when the top layer is selected from (b) a thermally imageable composition free of the said thermally sensitive supramolecular polymer, the limitations of claims 2-16 are met.

8. *The following rejections are based on this interpretation of the claims.*

#### *Claim Objections*

9. Claim 16 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or

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rewrite the claim(s) in independent form. Claim 16 is identical to claim 15 from which it depends.

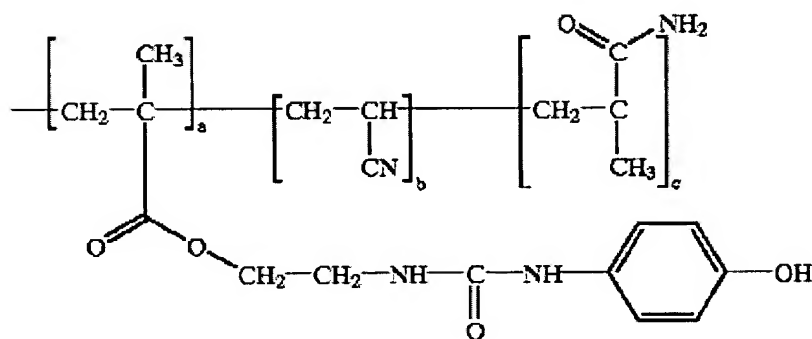
***Claim Rejections - 35 USC § 102***

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

11. Claims 1-16, 19-27, 30 and 32-33 are rejected under 35 U.S.C. 102(e) as being anticipated by Patel et al. (US 6352811 B1). Patel exemplifies a two layer imageable element wherein the first layer was prepared by dissolving acrylic resin AR-6, ADS-830 IR dye and Victoria Blue BO indicator dye into 2-methoxyethanol (see ex. 12). The resin AR-6 has the



structure:

(c. 15, l. 29-45).

The said solution is spin coated onto a grained and anodized aluminum substrate to produce a uniform coating. The resulting coated substrate was over-coated with a solution of 1% toluene solution of Acryloid A-21 (a poly (methyl methacrylate) solution) by spin coating.

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The resultant 2-layer plate was laser imaged on a Creo Trendsetter exposure device (ex. 11-12, c. 23, l. 45-c. 24, l. 23). It is the examiner's position that the first monomer of resin AR-6 meets the limitations of the last formula of instant claim 25 wherein R4 is an alkyl having 2 carbon atom. The acrylonitrile and methacrylamide monomers both meet the limitations of an ethylenically unsaturated monomer as set forth in instant claims 26 and 27. The ADS-830 IR dye meets the limitations of a photothermal converter material as set forth in instant claim 30. The overcoat layer of poly (methyl methacrylate) meets the limitations of a top layer that is thermally imageable and free of the claimed thermally sensitive supramolecular polymer (i.e., claimed component b). The resin AR-6 readily has a H-bond within the urea linkage. Patel teaches that the OH group of the taught resin forms hydrogen bonding with Victoria Blue BO (c. 6, l. 49-65), thereby meeting the limitations of having two centered H-bond units.

12. The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

***Claim Rejections - 35 USC § 103***

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be

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patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Patel et al. (US 6352811 B1) as applied to claims 1-16, 19-27, 30 and 32-33 above, and further in view of Eames (US 3,962,513 A). Patel, as discussed above, teaches all the limitations of the instant claims except it fails to teach the use of a novolak resin in the top layer as set forth in instant claim 31. Patel does however teach that the second layer of the composite structure contains as an essential ingredient a polymeric material that is ink-receptive and soluble in an organic solvent. The said second layer may also contain a dye or pigment. When the first layer contains a photothermal conversion material, the second layer may also contain a photothermal conversion material, which typically is the same IR absorbing dye, which is used in the first layer. Suitable examples of the taught polymer material include polymethylmethacrylate, polystyrene, polyester, polyamide, polyurea and nitrocellulose (c. 9, l. 38-61). It is the examiner's position that one of ordinary skill in the art would have been motivated by the teachings of Patel to use any material which is ink-receptive and soluble in an organic solvent in the second layer of Patel. It is well known and conventional in the art, as supported by the prior art teachings of Eames (c. 2, l. 40-53), that novolak resins, polystyrene resins and poly (meth) acrylate resins are ink receptive or oleophilic resins which are used conventionally used in the lithographic art. One of ordinary skill in the art would have been motivated by what is well known and conventional in the lithographic art to substitute a novolak resin for the taught poly (methyl methacrylate) resin of example 12 of Patel and expect reasonably similar results. One of ordinary skill in the art would also have

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been motivated by the teachings of Patel (c. 9, l. 51-59) to incorporate the same IR absorbing dye used in the first layer of example 12 into the second layer of example 12

*Allowable Subject Matter*

15. Claims 17-18 and 28-29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

16. The following is a statement of reasons for the indication of allowable subject matter: review of the prior art failed to teach and/or suggest the limitations of instant claims 17-18 and 28-29.

17. Claim 34 is allowed.

18. The following is an examiner's statement of reasons for allowance: review of the prior art failed to teach and/or suggest an element wherein the top and bottom layer both comprise a thermally imageable composition comprising a thermally sensitive supramolecular polymer having at least one covalently bonded unit and at least one thermally reversible non-covalently bonded units which include two or more centered H-bond within each non-covalently bonded unit.

19. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

*Conclusion*



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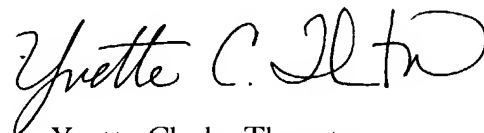
20. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Fiebag et al. (US 6,649,324 B1) pertaining to aqueous developer for lithographic printing plates (see example 2).

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yvette C. Thornton whose telephone number is 571-272-1336. The examiner can normally be reached on Monday-Thursday 8-6:30.

22. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark F. Huff can be reached on 571-272-1385. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

23. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-1300.



Yvette Clarke Thornton  
Patent Examiner  
Art Unit 1752

yct  
January 22, 2004